WORKING DRAFT 2004 DDF CALL (8/6/03, #3))

National Aeronautics and Space Administration Goddard Space Flight Center

SUBJECT: **2004** Director's Discretionary Fund (DDF) - Call for Proposals (Extension Proposals due on 9/18/03, New Proposals due on 9/25/03

The DDF is a special program supporting imaginative, *innovative* ideas at Goddard Space Flight Center (GSFC). It is intended to lay foundations for the future. Many projects have blossomed into new instruments, flights, or research directions.

I anticipate approximately \$2.5 million in DDF funds for FY 2004. This will allow both extension of some projects currently underway and new starts. For FY 2004, I would like a number of small projects with 1-year completion targets, and perhaps one or two carefully selected large (up to \$250K) and/or multi-year projects. I am especially interested in funding DDF projects relevant to Goddard's Strategic Implementation Plan. As always, I encourage inter-Directorate projects and University collaborations. I would like to see research proposals with an educational and/or public outreach focus. I will allocate 5-10 percent in this area. These will be evaluated by a special Educational Panel.

Holders of current DDF awards who began projects in FY 2003 with plans to complete work in FY 2004, should submit an Extension request following the enclosed guidelines. Proposals for work which are a spin-offs, or development steps beyond work previously funded should be submitted as New Proposals.

Undergraduate and graduate summer interns from the 2004 10 week NASA Academy and Student Internship Programs are available at no cost. They can contribute substantially to the progress of DDF projects. In writing proposals, one should consider how a bright student might increase productivity during Summer, 2004.

The University Programs Office manages the DDF. They will assemble a technical review panel consisting of Goddard Senior Fellows plus a few other senior GSFC engineers and scientists (as appropriate), and they will coordinate the review process. The Education Officer, (Dr. Robert Gabrys) will coordinate the Education and Outreach DDF. The University Programs Office will also disburse and oversee the awarded funds.

I encourage you to propose your best ideas. Innovative high risk, high payoff, DDF projects help set the course for Goddard's future.

A. V. Diaz Director

2004 DIRECTOR'S DISCRETIONARY FUND

Guidelines for Submission of Proposals

Eligibility:

- * may be submitted by any GSFC civil servant; they may include outside collaborators. Inter-Directorate work is encouraged
 - * must be innovative, likely risky, and funding through other mechanisms unlikely.
- * must: have significant potential to enhance payoff to Goddard's mission and future viability as a Center; be technically feasible, innovative and visionary, and make efficient use of resources.

Renewals:

Renewals, will be treated as either (1) 2nd-year Extensions, or (2) New proposals, as follows:

- 1. A proposal for work that is a continuation to completion of work funded in FY 2003 will be treated as a simple extension to the original proposal. It will be approved or denied on the basis of progress-to-date, potential for completion, innovation, risk, and payoff. It is best if the original proposal indicated that an extension request was likely.
- 2. A proposal for work that is a spin-off, or development step beyond, or different from the work originally proposed must be submitted as a New Proposal. It will be evaluated from scratch on equal footing with all other new proposals.

Submission Rules:

Our web site at http://ddf.gsfc.nasa.gov/ has complete instructions for submitting a proposal. Proposals should be submitted as free-form in simple ASCII, Word, RIF, or pdf. The web application will be available after August 22, 2003. For questions or difficulties transmitting electronically, ddf@listserv.gsfc.nasa.gov. We will acknowledge receipt of proposals by posting a list of all proposers at the DDF website (http://ddf.gsfc.nasa.gov/list.html)

New Proposals

For New Proposals, free-form text (2 pages maximum; see sample write-up at http://ddf.gsfc.nasa.gov/samples/new.html); follow the cover sheet, describing concisely:

- 1. **Brief Background**, understandable to the non-specialist but meaningful to the specialist.
- 2. **Objectives**, including end goal or product,
- 3. **Research and Development Plan**, including projected schedule and future plans and objectives.
- 4. **Context:** How does this enhance Goddard's mission, and why is it appropriate for DDF consideration?

If the proposal is for education or outreach, this section must address the new education organization vision, mission, goals, and priorities. (Education links are shown under Education proposals).

- 5. **Innovation Summary**: Each proposal should contain a brief summary section addressing the following questions:
 - a. What are the innovative elements in the work proposed?
 - b. What are the risk factors?
 - c. What will be the "payoff" to science and/or engineering? to NASA, to Goddard (if it succeeds)?
 - d. What are the criteria for success?
- 6. **Budget**: List required funds and PI/Co-I time (in fractions of a man-year). Line item breakdowns showing fund usage must be given (see the example). In full-cost accounting this is an important consideration. If a second year is anticipated, a brief rationale should be included in the proposal budget.

Extension Requests

For Extension requests, follow the cover sheet with a copy of the original (FY 2003) proposal, then free-form text (2-page maximum; see sample write-up at http://ddf.gsfc.nasa.gov/samples/extension.html) describing:

1. **Progress-to-date** including significant results, roadblocks, etc.

- 2. **Justification for Extension**: (Why is it necessary?)
- 3. **Research and Development Plan** (including projected schedule)
- 4. Innovation Summary
 - a. What are the innovative elements in the work proposed?
 - b. What are the risk factors?
 - c. What will be the "payoff" if it succeeds: to science and/or engineering, to NASA, to Goddard?
 - d. What are the criteria for success?
- 5. **Budget**: List required funds and PI/Co-I time (in fractions of a man-year Line item breakdowns, showing fund usage, must be given.

Education/Outreach

For Education and Outreach, submit proposal (two page maximum) clearly describing:

- 1. Relationship to the New Education Organization (Code N) vision, mission, goals, and priorities.
- 2. **Relationship to a NASA Enterprise**: Earth Science, Space Science, Biological and Physical Research, Aerospace Technology, or Human Exploration
- **3. Innovative Summary,** including connection to the "As Only NASA Can" theme:
 - a. What are the innovative elements in the work proposed?
 - b. What are the risk factors?
 - c. What will be the "payoff" if it succeeds to science and/or engineering, to NASA to Goddard?
 - d. What are the criteria for success?
- 6. Clearly Identified Customer.
- 5. **If a K-12, Relationship to National Standards/** school curriculum and/or teacher training.
- 6. Sustainability, Scale-up Potential, and Deployment Strategies.

Education Links:

- * National Science Education Standards
- * Benchmarks for Science Literacy
- * National American Indian Standards
- * Mid-continent Research for Education and Learning (McREL)

NOTE: All proposal funding requests that include university faculty or student involvement, or contractor support must list these as separate line items (except for Academy or SIP Interns – see the next section). Contractors may not take a lead or major role in the project development work; however, they may be used to provide necessary specific support services.

DDF Interns

If requesting a summer intern for your FY 2004 DDF project, please submit a brief write-up about the project that can be shown to the prospective student. Funds for DDF Interns should not be listed as a project requirement. (Visit the sample write-up at http://ddf.gsfc.nasa.gov/samples/intern.html)

Final Report

Please be aware that a clearly written final report containing all requested information is an essential part of this program. This report must be submitted on time and will be included in a final year-end report that will be made available to the outside community upon request. The call for this report should be expected in December 2004 for projects funded in FY2004.

Free Advice:

The Goddard Senior Fellows are willing to provide advice on your proposal at the development or execution phases. Expertise areas of some of the Fellows are listed on our website:. http://university.gsfc.nasa.gov/GSF/index.html

2004 DDF Schedule and Deadlines

August 15 DDF Announcement for FY2004 Proposals

August 22 Application available at DDF Website

September 18 Extension requests due by COB

September 25 New Proposals due by COB

October 3 Results of Review Panel first screening completed

Yes/Maybe/No)

October 7 Proposers will be called with results and scheduled for oral

presentation, or de-briefed if not selected (10/7-10/10)

Oct. 21-Nov. 6 Extension and New Technical Oral Presentations (5 minutes) to

Review Panel

Projected Dates for Oral Reviews:

Oct. 21, 24, 28, 31 Nov. 4, 5, 6

Technical Oral Presentations (5 minutes) to Review Panel- new proposals Note: The number of proposals received will determine if all of the above dates will be required.

With the exception of Education proposals, all presentations will be held in Bldg. 8/MCC (Rm. N303) 8 a.m. - 5 p.m.

Education Presentations and panels will be coordinated by the Education Office Dr. Robert Gabrys, on Ext. 6-7205.

December 4 Panel Recommendations to Center Director (1-3 p.m.) Bldg. 8, MCC, Room 309

December 8 Announcement of 2004 Awards

December 12 DDF 2003 Final Reports due to Code 603.1, Building 28

June-July 2004 Optional Interim Reports (requested particularly when there are results of particular interest or unanticipated difficult problems)

December 2004, DDF 2004 Final Reports will be due